

Date: Thu, 29 Apr 93 19:49:09 PDT  
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>  
Errors-To: Info-Hams-Errors@UCSD.Edu  
Reply-To: Info-Hams@UCSD.Edu  
Precedence: Bulk  
Subject: Info-Hams Digest V93 #519  
To: Info-Hams

Info-Hams Digest                      Thu, 29 Apr 93                      Volume 93 : Issue 519

Today's Topics:

                    Cable TV Descrambler Sources?  
            Daily Solar Geophysical Data Broadcast for 29 April  
                    DR1200 InterMOD reduction mod file  
                                no-code defense  
                                Rehabbing an ICOM W2A HT  
                                Standard 12 VDC Connectors  
                                STS-55 Element Set GSFC-010  
            Weekly Solar Terrestrial Forecast & Review for 30 April

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>  
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available  
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.

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Date: 29 Apr 93 14:38:59 EDT  
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!  
darwin.sura.net!sgiblab!wetware!spunky.RedBrick.COM!psinntp!psinntp!  
arrrl.org@network.UCSD.EDU  
Subject: Cable TV Descrambler Sources?  
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, bkwong@unixg.ubc.ca (Brian Kwong) writes:  
[deleted]

>What some cable companies have done is send a signal spike through the cable  
>system. Their own boxes obviously would be protected somehow, but the bootleg  
>boxes would be affected. When the person calls in to report problems with the  
>signal, the police would be on their way.

Gee, I'd be pretty irate if they blew up my cable-ready TV by sending a

spike down the line!

-----  
Jon Bloom, KE3Z | jlbloom@arrl.org  
American Radio Relay League |  
225 Main St., Newington CT 06111

Date: 30 Apr 93 02:19:37 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Daily Solar Geophysical Data Broadcast for 29 April  
To: info-hams@ucsd.edu

!!BEGIN!! (1.0) S.T.D. Solar Geophysical Data Broadcast for DAY 119, 04/29/93  
10.7 FLUX=106.5 90-AVG=131 SSN=060 BKI=1122 3333 BAI=010  
BGND-XRAY=B1.9 FLU1=9.0E+05 FLU10=1.2E+04 PKI=1111 3333 PAI=009  
BOU-DEV=005,005,011,012,027,037,025,038 DEV-AVG=020 NT SWF=00:000  
XRAY-MAX= C1.3 @ 0452UT XRAY-MIN= B1.5 @ 2358UT XRAY-AVG= B3.1  
NEUTN-MAX= +000% @ 0005UT NEUTN-MIN= +000% @ 0005UT NEUTN-AVG= +0.0%  
PCA-MAX= +0.0DB @ 0005UT PCA-MIN= +0.0DB @ 0005UT PCA-AVG= +0.0DB  
BOUTF-MAX=55402NT @ 1335UT BOUTF-MIN=55352NT @ 1841UT BOUTF-AVG=55387NT  
GOES7-MAX=P:+147NT@ 1914UT GOES7-MIN=N:+001NT@ 2340UT G7-AVG=+098,+037,+012  
GOES6-MAX=P:+161NT@ 1612UT GOES6-MIN=N:-099NT@ 2359UT G6-AVG=+111,-011,-045  
FLUXFCST=STD:120,120,120;SESC:120,120,120 BAI/PAI-FCST=005,010,015/010,010,015  
KFCST=2114 3121 2234 3322 27DAY-AP=005,004 27DAY-KP=1121 1212 1111 0112  
WARNINGS=  
ALERTS=  
!!END-DATA!!

NOTE: The Effective Sunspot Number for 28 APR 93 was 72.9.  
The Full Kp Indices for 28 APR 93 are: 2o 1+ 1- 1+ 2o 2o 2o 1+

-----  
Date: Fri, 30 Apr 1993 02:03:57 GMT  
From: csus.edu!netcom.com!wa2ise@decwrl.dec.com  
Subject: DR1200 InterMOD reduction mod file  
To: info-hams@ucsd.edu

copied from packet:

Msg#	TSF	Size	Date	Time	Arrived	#Rd	Seq #	Msg ID	Route
612	BF	2607	21-Apr	1643z	24-Apr	0	(002799 - 28806_W0LJF )	[ ]	
K0ZL ==> MODS@USBBS									
"DR-1200 INTERMOD REDUCED"									

ALINCO DR-1200 INTERMOD REDUCTION

CAUTION: THE FOLLOWING PROCEDURE INVOLVES DESOLDERING SMD (SURFACE MOUNT DEVICES). IF YOU ARE NOT QUALIFIED TO WORK ON SMD DEVICES OR DO NOT HAVE THE PROPER EQUIPMENT, DO NOT ATTEMPT THIS MOD! SEEK PROFESSIONAL TECHNICAL ASSISTANCE. THE ORIGINATOR OF THIS MODIFICATION IS NOT RESPONSIBLE FOR ANY LOSS INVOLVING THE PERFORMANCE OF THIS MODIFICATION.

CAUTION: THIS RADIO EMPLOYS STATIC SENSITIVE DEVICES. SUITABLE MEANS SHOULD BE EMPLOYED TO ASSURE A STATIC-FREE ENVIRONMENT PRIOR TO BEGINNING WORK ON THIS RADIO.

1. REMOVE POWER AND ANTENNA FROM RIG
2. REMOVE BOTTOM COVER
3. LOCATE C-19, LEFT SIDE FRONT OF BOARD (CLEARLY LABELED, NEAR Q3).
4. REMOVE C-19: SUCK UP THE SOLDER AND CAREFULLY PRY AWAY FROM BOARD WHILE STILL WARM.
5. SAVE THE CAPACITOR IN CASE YOU GOT THE WRONG PART!
6. REASSEMBLE THE RADIO, NO RETUNING NECESSARY.

This capacitor connects D1 (back to back diodes) to the first IF line. D1 is supposed to be a "limiter". Unknown why Alinco chose to put in such a limiter, as the integrated IF chip IC-1, an MC3357, has a built-in limiter. Also, the Kenwood TM-231 which uses nearly the same layout and circuit, doesn't have such a circuit.

While the intermod hasn't gone away entirely (I'm not done with it yet!), it has diminished enough to make the rig usable on packet AND voice now.

73 de Bill, K0ZL@W0LJF.#NECO.CO.NOAM

=====  
Note: I haven't tried or verified this. proceed at your own risk. WA2ISE

-----  
Date: Thu, 29 Apr 1993 22:22:04 GMT  
From: sdd.hp.com!zaphod.mps.ohio-state.edu!magnus.acs.ohio-state.edu!csn!cherokee!NewsWatcher!user@network.UCSD.EDU  
Subject: no-code defense  
To: info-hams@ucsd.edu

In article <1993Apr26.042844.18653@nnnnpd2.cxo.dec.com>, little@nuts2u.enet.dec.com (nuts2u::little) wrote:

>  
> "system@garlic.sbs.com (Anthony S. Pelliccio)" writes:  
>  
> >I really don't have a big problem with the no-code license, but I do  
> >have a problem with no-code licensees who scream for this and that  
> >without making the effort to upgrade.

>  
> Glad to hear that. I made the effort and I \*still\* think the code  
> requirement is a crock.  
>  
> >It also depends on what area of the country you're in. I know out here,  
> >2m has become the CB of the ham bands. And hey, look at Britain where  
> >they won't allow their entry class licensees access to 144-146MHz  
> >because of "Congestion and poor operating practices."  
>  
> Right, and learning the code somehow instills good operating practices. I  
> guess those NALs the FCC has been handing out recently and the nonsense on  
> 14.313 are examples of "good operating practices". Please provide one  
> single shred of proof that learning morse code improves operating  
> practices.  
>  
> I suppose the no-code bashing that seems to emanate from your system is  
> another example of the "good operating practices" you're hoping to find?  
>  
> 73,  
> Todd  
> N9MWB

It's not the code that instills good operating practices, but the  
personality required and the commitment to pass through the code-gate. It's  
no different than any of a number of silly requirements that have  
side-benefits --- for instance Bachelor's Degrees they really don't mean  
much other than  
a person has enough conviction and ability to endure the system and that  
means  
something just as the ability and commitment to learn code says something  
about  
to person willing to do it.

KAC

Opinions? Can anyone actually have opinions, or are they no more  
than dust motes floating in the sunlight of collective intellect.

Kenny A. Chaffin	{...boulder}!uswat!ken
U S WEST Advanced Technologies	ken@advtech.uswest.com
4001 Discovery Drive Boulder, CO 80303	(303) 541-6355

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Date: Thu, 29 Apr 1993 21:13:49 GMT  
From: news.acns.nwu.edu!casbah.acns.nwu.edu!rdewan@network.UCSD.EDU  
Subject: Rehabbing an ICOM W2A HT  
To: info-hams@ucsd.edu

## Rehabbing an ICOM W2A

=====

by AA9CH

Summary: A description of process to replace the front panel  
(including clear LCD cover) and keyboard of an ICOM W2A HT.

Disclaimer: This requires a steady hand and the willingness to disassemble an HT into a mess of small parts. If you are unsure then do not attempt it or you will be mailing ICOM Repair a bag of parts. :(

So here it goes. I used an ICOM W2A for a good part of a year for packet and as a hip and mobile station. As I did not use a protective cover, the HT was a mess of scratches etc. Some keyboard letters had completely worn off. When the power connector got loose intermittent, I decided to do something. I called ICOM and they wanted a minimum of \$65 of labor + parts + shipping. Hah!

I ordered a new front panel. It is a wrap around piece that includes a magnifying clear part for the display. It cost \$13.88 and shipping. ICOM threw in a free keyboard and a rain cap ( the small plugs that fit into the power and other connector holes when they are not in use.)

I spread a soft lint free cloth to work on so that the screws would not roll off and I would have a soft surface to set the HT on. Case disassembly instructions are in the manual. Do not forget the small screws on the side of the HT that has the PTT button.

Remove the leaf spring for the battery latch and set it aside. It appears like an additional contact on the bottom of the HT.

Pull off the tone board.

The UHF and VHF radio sections are in small sealed mettalic boxes. The two boxes are connected by two screws. One at the bottom end of the HT and one near the PTT button. Take these off.

The radio boxes are connected through miniature multi-pin connectors to a PC board on the top of the HT. Pull them, very gently, up and out. Do it one at a time. Set them aside.

Now examine the flexible PC board on lying along the bottom of the cavity in the HT. It has the CPU, spkr, mic, lithium battery and other stuff. It is held to the front case by 6 screws. All but one of them have metal tongues to establish ground contact. You can figure out the placement of the screws by comparing the cavity and the

replacement front. Take these screws off and set aside.

The front will now separate from the rest of the HT. The flexible board will remain attached to the top of the HT. Now comes a critical part. The flexible board makes contact with an inflexible board that supports the keyboard through a small pink and black foam like pad. It is about 1/8" square and an inch long. Take note of it and its position and set it aside.

Now remove the screws holding the inflexible pc board to the front case. Remove the board and the metal shield (very delicate - be gentle.) Remove the small translucent silicone piece that conducts the light from the surface mounted T/R LED to the front case.

Install the light conductor for the T/R LED into the new case and put in the new keyboard.

Reinstall rest of the parts in the last out - first in manner. Do not forget to carefully place the pink and black foam connector between the inflexible and flexible pc boards.

A last hint. Take particular care with the case screws. These are self tapping and it is easy to destroy their heads.

Have fun.

Rajiv  
aa9ch

-----  
Date: Thu, 29 Apr 1993 22:00:30 GMT  
From: news.Hawaii.Edu!uhunix.uhcc.Hawaii.Edu!jherman@ames.arpa  
Subject: Standard 12 VDC Connectors  
To: info-hams@ucsd.edu

In article <1993Apr29.174557.24342@porthos.cc.bellcore.com>  
whs70@dancer.cc.bellcore.com (sohl,william h) writes:  
>In article <9304291518.AA23622@emx.cc.utexas.edu> miles@emx.cc.utexas.edu (Miles  
Abernathy) writes:  
>>male body and vice-versa. Use male bodies on power sources and female  
>>bodies on radios, since the pins in un-plugged female bodies could  
>>accidentally be shorted together. (humor shields, UP!)

Shouldn't the rolls of "male" and "female" be switched here? I would think  
you would want the female connector to be attached to the power source.  
[Or have I misread the above]

NH6IL

interested in casual scanning of SW and  
also in good reception of local and national radio.

Thanks.

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richard@harlequin.com (Internet)  
richard@harlequin.co.uk (Internet)  
RPTB1@UK.AC.CAMBRIDGE.PHOENIX (JANET)

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Date: 29 Apr 93 21:39:16 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: STS-55 Element Set GSFC-010  
To: info-hams@ucsd.edu

SB SAREX @ AMSAT \$STS-55.011  
STS-55 Element Set GSFC-010

The following represents the latest Keplerian element set for the STS-55 space shuttle mission as generated by Ron Parise, WA4SIR, at the Goddard Space Flight Center. Gil Carman, WA5NOM reports that the Reaction Control System (RCS) burn performed this morning lowered the perigee altitude by more than a mile. This will cause the predicted orbit to be 36 seconds late from the actual orbit by the time the SAREX A/B antenna test is performed tomorrow on orbit 61 and 62.

SAREX listeners in the southeast portion of the U.S. are encouraged to participate in the SAREX antenna test by noting the times of Acquisition of Signal, Loss of Signal, and the time and amplitude of the maximum S-meter reading on your radio for each orbit. On orbit 61 the shuttle crew will use the SAREX window mounted antenna. On orbit 62 they will use the SAFEX externally mounted antenna. All downlink will be conducted on 145.55 MHz. Please make sure your watch is synchronized with WWV or any other calibrated time source. See February 1993 QST, page 42 for more details.

STS-55 Element Set GSFC-010

STS-55

1	22640U	93	27	A	93119.55437440	0.00044139	00000-0	12681-3	0	106
2	22640		28.4609		247.0889	0010670	278.6023	81.3380	15.91492930	483

Satellite: STS-55

Catalog number: 22640

Epoch time: 93119.55437440 (29 APR 93 13:18:17.95 UTC)  
Element set: GSFC-010  
Inclination: 28.4609 deg  
RA of node: 247.0889 deg Space Shuttle Flight STS-55  
Eccentricity: 0.0010670 Keplerian Elements  
Arg of perigee: 278.6023 deg  
Mean anomaly: 81.3380 deg  
Mean motion: 15.91492930 rev/day Semi-major Axis: 6676.2366 Km  
Decay rate: 0.44E-03 rev/day\*2 Apogee Alt: 304.97 Km  
Epoch rev: 48 Perigee Alt: 290.73 Km

NOTE - This element set is based on NORAD element set # 010.  
The spacecraft has been propagated to the next ascending  
node, and the orbit number has been adjusted to bring it  
into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

/EX

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Date: 29 Apr 93 22:11:29 GMT  
From: news-mail-gateway@ucsd.edu  
Subject: Weekly Solar Terrestrial Forecast & Review for 30 April  
To: info-hams@ucsd.edu

--- SOLAR TERRESTRIAL FORECAST AND REVIEW ---  
April 30 to May 09, 1993

Report Released by Solar Terrestrial Dispatch  
P.O. Box 357, Stirling, Alberta, Canada  
T0K 2E0  
Accessible BBS System: (403) 756-3008

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SOLAR AND GEOPHYSICAL ACTIVITY FORECASTS AT A GLANCE  
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10-DAY SOLAR/RADIO/MAGNETIC/AURORAL ACTIVITY OUTLOOK

NOTE: We have replaced the "Solar Activity" column with forecast values of  
the 10.7 cm solar radio flux. These values are "best estimates"  
compiled at the time of this report.





VERY ACTIVE		*	***	*						*	NONE
ACTIVE	***	***	***	***	**	*	*	*	*	***	NONE
UNSETTLED	***	***	***	***	***	***	***	***	***	***	NONE
QUIET	***	***	***	***	***	***	***	***	***	***	NONE
VERY QUIET	***	***	***	***	***	***	***	***	***	***	NONE
-----											
Geomagnetic Field	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Anomaly
Conditions	Given in 8-hour UT intervals										Intensity
-----											

CONFIDENCE LEVEL: 65%

#### NOTES:

Predicted geomagnetic activity is based heavily on recurrent phenomena. Transient energetic solar events cannot be predicted reliably over periods in excess of several days. Hence, there may be some deviations from the predictions due to the unpredictable transient solar component.

#### 60-DAY GRAPHICAL ANALYSIS OF GEOMAGNETIC ACTIVITY

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Chart Start Date: Day #059

#### NOTES:

This graph is determined by plotting the greater of either the planetary

A-index or the Boulder A-index. Graph lines are labelled according to the severity of the activity which occurred on each day. The left-hand column represents the associated A-Index for that day.

Q = Quiet, U = Unsettled, A = Active, M = Minor Storm,  
J = Major Storm, and S = Severe Storm.

#### CUMULATIVE GRAPHICAL CHART OF THE 10.7 CM SOLAR RADIO FLUX

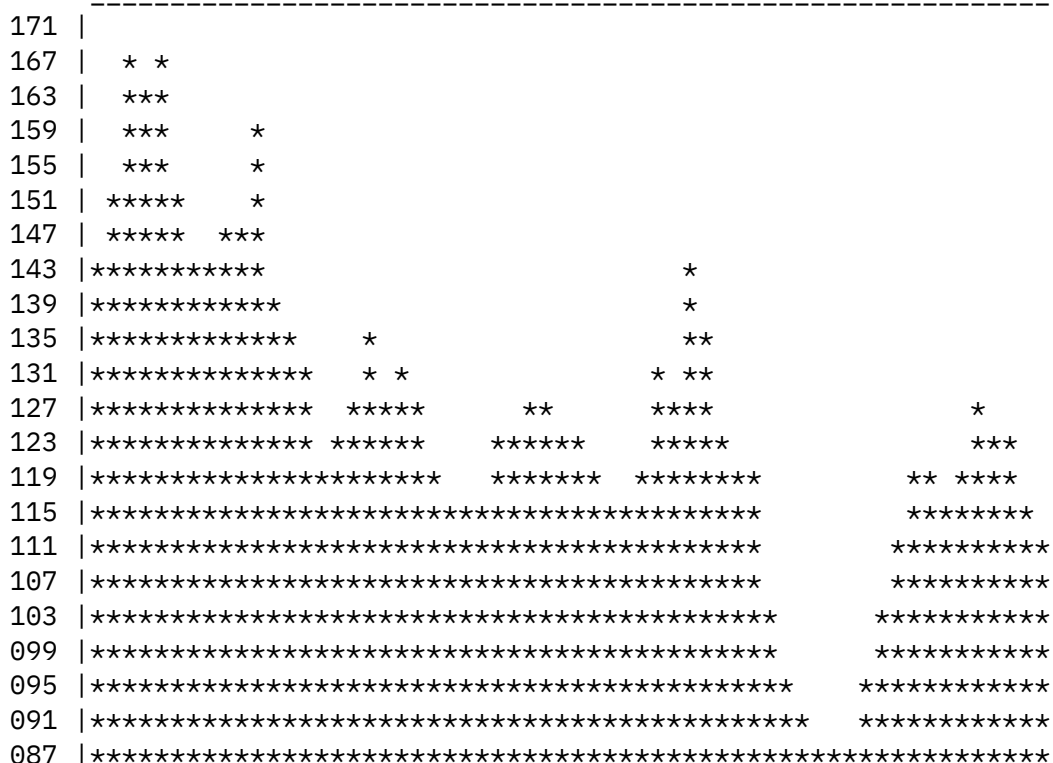
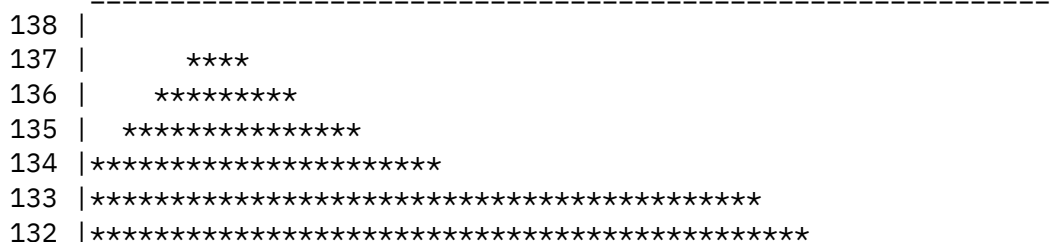


Chart Start: Day #061

#### GRAPHICAL ANALYSIS OF 90-DAY AVERAGE SOLAR FLUX



```

131 | *****
130 | *****
129 | *****

```

-----

Chart Start: Day #061

#### NOTES:

The 10.7 cm solar radio flux is plotted from data reported by the Penticton Radio Observatory (formerly the ARO from Ottawa). High solar flux levels denote higher levels of activity and a greater number of sunspot groups on the Sun. The 90-day mean solar flux graph is charted from the 90-day mean of the 10.7 cm solar radio flux.

#### CUMULATIVE GRAPHICAL CHART OF SUNSPOT NUMBERS

```

182 |
174 |
166 |
158 | * *
150 | ** *
142 | *****
134 | *****
126 | ***** *
118 | * ***** *
110 | ***** ** * * * * *
102 | ***** * * * * *
094 | ***** ** *** **
086 | ***** ** *** **
078 | *****
070 | *****
062 | *****
054 | *****
046 | *****
038 | *****
030 | *****
022 | *****

```

-----

Chart Start: Day #061

#### NOTES:

The graphical chart of sunspot numbers is created from the daily sunspot number counts as reported by the SESC.

# HF RADIO SIGNAL PROPAGATION PREDICTIONS (30 APR - 09 MAY)

## High Latitude Paths

CONFIDENCE LEVEL ----- 65%	EXTREMELY GOOD												
	VERY GOOD												
	GOOD												
	FAIR	***	**	*	**	***	***	***	***	***	**	*	
	POOR		*	* *	*						*	* *	
	VERY POOR												
	EXTREMELY POOR												
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PROPAGATION		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
QUALITY		Given in 8 Local-Hour Intervals											
-----		-----											

## Middle Latitude Paths

CONFIDENCE LEVEL ----- 65%	EXTREMELY GOOD												
	VERY GOOD												
	GOOD	***	**	**	**	***	***	***	***	***	***	**	
	FAIR		*	*	*							*	
	POOR												
	VERY POOR												
	EXTREMELY POOR												
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PROPAGATION		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
QUALITY		Given in 8 Local-Hour Intervals											
-----		-----											

## Low Latitude Paths

CONFIDENCE LEVEL ----- 70%	EXTREMELY GOOD												
	VERY GOOD	*	*				*	*	*				
	GOOD	* *	* *	***	***	***	* *	* *	* *	***	***		
	FAIR												
	POOR												
	VERY POOR												
	EXTREMELY POOR												
-----		-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
PROPAGATION		Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
QUALITY		Given in 8 Local-Hour Intervals											
-----		-----											

## NOTES:

NORTHERN HEMISPHERE			SOUTHERN HEMISPHERE		
High latitudes >= 55	deg. N.		High latitudes >= 55	deg. S.	
Middle latitudes >= 40 < 55	deg. N.		Middle latitudes >= 30 < 55	deg. S.	
Low latitudes < 40	deg. N.		Low latitudes < 30	deg. S.	

POTENTIAL VHF DX PROPAGATION PREDICTIONS (30 APR - 09 MAY)  
INCLUDES SID AND AURORAL BACKSCATTER ENHANCEMENT PREDICTIONS

## HIGH LATITUDES

FORECAST   Given in 8 hour local time intervals											SWF/SID ENHANCEMENT										
CONFIDENCE   Fri   Sat   Sun   Mon   Tue   Wed   Thu   Fri   Sat   Sun											F   S   S   M   T   W   T   F   S   S										
-----   ---   ---   ---   ---   ---   ---   ---   ---   ---   ---											-   -   -   -   -   -   -   -   -   -   -										
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
20%	***	***	***	***	***	***	***	***	***	***	20%					*	*	*	*	*	*
40%	***	***	***	***	***	***	***	***	***	***	40%										
60%	***	**	*	**	***	***	***	***	***	**	60%										
80%											80%										
100%											100%										
=====	==	==	==	==	==	==	==	==	==	==		-----									
100%											100%										
80%											80%										
60%											60%										
40%		*	*	*	*					*	40%	*	*	*							*
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*	*
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	*
-----	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	-
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		F	S	S	M	T	W	T	F	S	S
VHF DX	Given in 8 hour local time intervals											AURORAL BACKSCATTER									

## MIDDLE LATITUDES

[illegible]

CHANCE OF	Fri Sat Sun Mon Tue Wed Thu Fri Sat Sun	F S S M T W T F S S
VHF DX	Given in 8 hour local time intervals	AURORAL BACKSCATTER

## LOW LATITUDES

FORECAST   Given in 8 hour local time intervals											SWF/SID ENHANCEMENT										
CONFIDENCE	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S	
-----	---	---	---	---	---	---	---	---	---	---	-	-	-	-	-	-	-	-	-	-	
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	
20%	***	***	***	***	***	***	***	***	***	***	20%	*	*	*	*	*	*	*	*	*	
40%	***	***	***	***	***	***	***	***	***	***	40%					*	*	*	*	*	
60%	***	***	***	***	***	***	***	***	***	***	60%										
80%											80%										
100%											100%										
=====	===	===	===	===	===	===	===	===	===	===		-----									
100%											100%										
80%											80%										
60%	*	*				*	*	*			60%										
40%	***	***	***	***	***	***	***	***	***	***	40%										
20%	***	***	***	***	***	***	***	***	***	***	20%										
0%	***	***	***	***	***	***	***	***	***	***	0%	*	*	*	*	*	*	*	*	*	
-----	---	---	---	---	---	---	---	---	---	---		-	-	-	-	-	-	-	-	-	
CHANCE OF	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	F	S	S	M	T	W	T	F	S	S	
VHF DX	Given in 8 hour local time intervals										AURORAL BACKSCATTER										

NOTES:

These VHF DX prediction charts are defined for the 30 MHz to 220 MHz bands. They are based primarily on phenomena which can affect VHF DX propagation globally. They should be used only as a guide to potential DX conditions on VHF bands. Latitudinal boundaries are the same as those for the HF predictions charts.

## AURORAL ACTIVITY PREDICTIONS (30 APR - 09 MAY)

## High Latitude Locations

CONFIDENCE LEVEL ----- 65%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE	*	*	*							**	**
	LOW	***	***	***	***	**	*	*	**	***	***	***
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
	-----	---	---	---	---	---	---	---	---	---	---	---
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

-----

Middle Latitude Locations

CONFIDENCE LEVEL ----- 70%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE		*									
	LOW	**	***	**							*	*
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
-----		---	---	---	---	---	---	---	---	---	---	
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

Low Latitude Locations

CONFIDENCE LEVEL ----- 80%	EXTREMELY HIGH											
	VERY HIGH											
	HIGH											
	MODERATE											
	LOW											
	NOT VISIBLE	***	***	***	***	***	***	***	***	***	***	***
-----		---	---	---	---	---	---	---	---	---	---	
	AURORAL	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	INTENSITY	Eve.Twilight/Midnight/Morn.Twilight										

NOTE:

A Dynamic Auroral Oval Simulation and Prediction Software Package is available to help make predictions and show the locations where auroral activity should be visible from the ground. For more information regarding this software, contact: "Oler@Rho.Uleth.CA", or "COler@Solar.Stanford.Edu".

For more information regarding these charts, send a request for the document, "Understanding Solar Terrestrial Reports" to: "Oler@Rho.Uleth.Ca" or to: "COler@Solar.Stanford.Edu". This document, as well as others and related data/forecasts exist on the STD BBS at: (403) 756-3008.

\*\* End of Report \*\*

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Date: Fri, 30 Apr 1993 02:05:48 GMT  
 From: anomaly.sbs.com!kd1hz@uunet.uu.net  
 To: info-hams@ucsd.edu



References <1rd74mINNpmc@news.aero.org>, <wb9omc.736022497@dynamo.ecn.purdue.edu>,  
<C69A1t.ELH@cbnewsc.cb.att.com>  
Subject : Sueing Jammers (Was: Re: "Busting" Jammers)

With all the discussion about getting the FCC and ARRL to take action against jammers, has anyone ever considered hitting jammers where it hurts most yourself - in their pocket book?

For instance, what would it take to sue someone who you can "prove" was jamming the repeater? What "evidence" would be necessary to "prove" your case in a civil court (since it is a preponderance of evidence and not beyond-a-reasonable-doubt)?

Has it been done? Anyone have any case law?

MD

--  
-- Michael P. Deignan / Sex is hereditary. If your  
-- Domain: mpd@anomaly.sbs.com / parents never had it, chances  
-- AT&TNet: +1 401 273 4669 / are you won't either...  
-- Telebit: +1 401 455 0347 /

-----  
Date: 29 Apr 93 23:50:21 GMT  
From: telesoft!garym@uunet.uu.net  
To: info-hams@ucsd.edu

References <1993Apr27.232644.14424@alsys.com>, <1993Apr28.162235.6011@alsys.com>,  
<1993Apr29.142121.2287@alsys.com>  
Subject : STS-55 Element Set (119.55)

The following represents the latest Kepelerian element set for the STS-55 space shuttle mission as generated by Ron Parise, WA4SIR, at the Goddard Space Flight Center. Gil Carman, WA5NOM reports that the Reaction Control System (RCS) burn performed this morning lowered the perigee altitude by more than a mile. This will cause the predicted orbit to be 36 seconds late from the actual orbit by the time the SAREX A/B antenna test is performed tomorrow on orbit 61 and 62.

SAREX listeners in the southeast portion of the U.S. are encouraged to participate in the SAREX antenna test by noting the times of Acquisition of Signal, Loss of Signal, and the time and amplitude of the maximum S-meter reading on your radio for each orbit. On orbit 61 the shuttle crew will use the SAREX window mounted antenna. On orbit 62 they will use the SAFEX externally mounted antenna. All downlink will be conducted on 145.55 MHz. Please make sure your watch is synchronized with WWV or any

other calibrated time source. See February 1993 QST, page 42 for more details.

STS-55

```
1 22640U 93 27 A 93119.55437440 +.00044139 00000-0 12681-3 0 106
2 22640 28.4609 247.0889 0010670 278.6023 81.3380 15.91492930 483
```

Satellite: STS-55

Catalog number: 22640

Epoch time: 93119.55437440 (29 APR 93 13:18:17.95 UTC)

Element set: GSFC-010

Inclination: 28.4609 deg

RA of node: 247.0889 deg Space Shuttle Flight STS-55

Eccentricity: 0.0010670 Keplerian Elements

Arg of perigee: 278.6023 deg

Mean anomaly: 81.3380 deg

Mean motion: 15.91492930 rev/day Semi-major Axis: 6676.2366 Km

Decay rate: 0.44E-03 rev/day\*2 Apogee Alt: 304.97 Km

Epoch rev: 48 Perigee Alt: 290.73 Km

NOTE - This element set is based on NORAD element set # 010.

The spacecraft has been propagated to the next ascending node, and the orbit number has been adjusted to bring it into agreement with the NASA numbering convention.

Submitted by Frank H. Bauer, KA3HDO for the SAREX Working Group

--

Gary Morris KK6YB Internet: elements-request@alsys.com

San Diego, CA, USA Phone: +1 619-457-2700

(for Shuttle Elements subscription info, email: listserv@alsys.com)

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End of Info-Hams Digest V93 #519

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